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To: Tom Binz
Subject: Fw: Ground Water Sampling and Analysis Plan
Date: Tuesday, June 15, 2010 12:43:10 PM

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Date: 07/02/2009 11:16 AM
Subject: Ground Water Sampling and Analysis Plan

Atul Salhotra:

The U.S EPA received your revised draft Quarterly Ground Water Sampling and Gauging Plan on June 24, 2009. This plan was originally submitted on June 8, 2009 and based upon your presentation on June 10, 2009 and an e-mail from me on June 18, 2009, revisions were requested and subsequently made. Though the review of the two submitted plans revealed several minor differences, our comments will be limited to the major concerns related to ground water sampling and gauging.

The U.S. EPA approves this plan with the following modifications and/or qualifications:

1. Metal analysis may be dropped for all metal constituents except for total and dissolved lead and arsenic.

2. Please identify additional wells that might be sampled and/or gauged in the event that access is not available at the time the crew is performing the work. This requirement is needed due the significant reduction of the total number of wells to be sampled and/or gauged and one of the stated objectives to evaluate flow direction.

3. Though the Sampling and Gauging Plan does not address the frequency of future sampling events (Appendix A does address this issue), the U.S. EPA believes that sampling and gauging may be performed on a semi-annual basis. This reduction of sampling/gauging does not include the Sentinel Wells which are still required to be sampled quarterly. After this sampling event, please discuss a proposed semi-annual schedule for future sampling/gauging with the Agencies.

4. The gauging list presented in Table 1b may be subject to change. Specifically, the Agencies will be reviewing the Apex ground water flow maps to assess if the reduction in gauging points still presents the flow contours correctly. If there are significant changes, the U.S. EPA may require additional wells be gauged.

5. The table below are the monitoring wells that are approved and are to be included for sampling

Well# Location and Purpose for Sampling	Screened Interval	ROST Data	Soil Analysis	Additional Comments
MP-81A **Western Boundary Well**	5-7 ft bgs.	Not available	HMW41 BTEX present @ 10-16	-Not sure why never sampled - Included in gauging -May be able to drop in future

			ft.bgs.	
MP-89A **Southern Boundary Well**	5-9 ft. bgs.	ROST 51 BTEX @ 1-5 ft. bgs. 10-20 ft. bgs 25-35 ft. bgs	Not available	
HMW-49B **Northern Boundary Well**	23.1-23.8 ft. bgs.	ROST 61 BTEX @ 30-35 ft. bgs.	HMW-49 BTEX present @ 7-9 ft. bgs.	
HMW–49A **Northern Boundary Well**	11-13 ft. bgs.	ROST 61 BTEX@ 30-35 ft. bgs.	HMW-49 BTEX present @ 7-9 ft. bgs.	-Not sure why never sampled - Included in gauging -May be able to drop in future
MP-92C **Western Boundary Well**	16-20 ft. bgs.	ROST 74 BTEX @ 18-38 ft. bgs.	Not available	
HMW-49C **Northern Boundary Well**	29-39 ft. bgs.	ROST 61 BTEX@ 30-35 ft. bgs.		
HMW-39A **Western Boundary Well**	13-20 ft. bgs.	ROST 13 BTEX @ 17-20 ft. bgs 25-40 ft. bgs	HMW-39 BTEX present @ 6-15 ft/ bgs @ 30 ft. bgs.	
HMW-39B **Western Boundary Well**	22-29 ft. bgs.	ROST 13 BTEX @ 17-20 ft. bgs 25-40 ft. bgs	HMW-39 BTEX @6-15 ft. bgs @ 30 ft. bgs.	
HMW-52B **Southeastern Boundary Well**	22-26 ft. bgs.	ROST 67 No BTEX	HMW-52 BTEX @10-12 ft. bgs @14-16 ft. bgs	
MP-81B **Western**	14-18 ft. bgs.	ROST 74 BTEX@	Not Available	

Boundary Well		18-20 ft. bgs 21-37 ft. bgs		
HMW – 25 **Sentinel Well**				
HMW-26 **Sentinel Well**				
HMW-27 **Sentinel Well**				
HMW-28 **Sentinel Well**				
HMW-29 **Sentinel Well**				
HMW-39C **Western Boundary Well**	32-41 ft. bgs.	ROST 13 BTEX @ 17-20 ft. bgs 25-40 ft. bgs	HMW-39 BTEX @ 6-15 ft/ bgs @ 30 ft. bgs.	
HMW-40C **Western Boundary Well**	24-38 ft. bgs.	ROST 19 BTEX @ 29-36 ft. bgs.	HMW-40 BTEX @ 22-24 ft. bgs	
HMW-49D **Northern Boundary Well**	41-50 ft. bgs.	ROST 61 BTEX@ 30-35 ft. bgs.	HMW-49 BTEX present @ 7-9 ft. bgs.	
MP-81C **Western Boundary Well**	17-32 ft. bgs.	ROST 74 BTEX@ 18-20 ft. bgs 21-37 ft. bgs	Not Available	
MP-89C **Southern Boundary Well**	23-27 ft. bgs	ROST 51 BTEX @ 1-5 ft. bgs. 10-20 ft. bgs 25-35 ft. bgs	Not available	
MP-92D **Western Boundary Well**	23-37 ft. bgs.	ROST 74 BTEX @ 18-38 ft. bgs.	Not available	

At this time the U.S. EPA agrees to drop the general chemistry and natural attentuation parameters listed in Appendix A. It is suggested that these parameters provide valuable information when

designing remediation systems. The U.S. EPA reminds Apex that when considering future ground water remediation, please include how these parameters may affect a ground water clean-up. Please call me if there are any questions with the above information.

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